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They take their food with both paws like the squirrel, and are fond of dipping it in water. I have noted with astonishment that they drink as well by lapping like the dog as by sucking. I have had several in a domesticated state, all of which possessed this peculiarity.

They are very active ; their sharp claws enable them to climb trees with great agility, and to leap with security from branch to branch. When on the ground they move forward by bounding, and in an oblique direction ; nevertheless they are swift enough, and rarely fall a prey to their pursuers.

They are easily domesticated when taken young, and are then harmless and amusing, but our endeavours to accustom two adults which we had secured to a domesticated state proved entirely vain. We were obliged to keep them chained ; they refused apparently to eat or drink, and died the first two weeks after we had entrapped them.

I have been told of a second species, but neither Mr. Vieth nor myself have ever met with it, nor have I been able to ascertain in what its distinguishing characters consist.

[To be continued.]

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- Sp. 1. *tetragonurus*, Herm.
 2. *pygmæus*, Laxm.
 3. *alpinus*, Schinz.

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Subgen. 1. PACHYURA, *De Selys.*

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The second portion of M. De Selys-Longchamps' work treats of the European species of *Mus*, L., which are all retained under one genus, admitting, however, of two sectional divisions as follows :

I. *Omnivorous ; ears oblong, naked* : containing six species, viz. *M. decumanus*, Pall. ; *M. Alexandrinus*, Geoff. ; *M. Rattus*, Lin. ; *M. Musculus*, Lin. ; *M. Islandicus*, Thienem. ; *M. sylvaticus*, Lin.

II. *Granivorous ; ears rounded, hairy* : containing two species, viz. *M. agrarius*, Pall., and *M. minutus*, Pall. The former of these is stated to be at the limits of the two groups, having the general form of *M. sylvaticus*, with the ears of the second group.

To the above, another section is prefixed, containing what he terms *Rats échimoides*, or those species the fur of which is mixed up with sharp prickly hairs, as in the genus *Echimyis*. This group, however, is entirely exotic, inhabiting the intertropical countries of Asia and Africa.

It is not pretended that these divisions are capable of such strict definition as to be applied rigorously, but it is thought that they are sufficiently natural, taking them in the whole, without going into details.

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The second portion of M. De Selys-Longchamps' work treats of the European species of *Mus*, L., which are all retained under one genus, admitting, however, of two sectional divisions as follows :

I. *Omnivorous ; ears oblong, naked* : containing six species, viz. *M. decumanus*, Pall. ; *M. Alexandrinus*, Geoff. ; *M. Rattus*, Lin. ; *M. Musculus*, Lin. ; *M. Islandicus*, Thienem. ; *M. sylvaticus*, Lin.

II. *Granivorous ; ears rounded, hairy* : containing two species, viz. *M. agrarius*, Pall., and *M. minutus*, Pall. The former of these is stated to be at the limits of the two groups, having the general form of *M. sylvaticus*, with the ears of the second group.

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I. The first section consists of those species which have the *external ears shorter than the fur, often almost none at all: eyes very small.*

This section comprises the two subordinate groups of (1.) *Campagnols aquatiques* (HEMIOTOMYS, De Selys,) including *A. amphibius*, Lacep.; *A. monticola*, De Selys; *A. destructor*, Savi, and *A. terrestris*, Savi: and (2.) *Campagnols Lemmings* (MICROTUS, De Selys,) including the *A. fulvus* of Desmarest, and the *A. Savii* of De Selys.

II. The second section consists of those species which have the *external ears as long as the fur and well developed; eyes varying, often prominent.*

This section is subdivided into the two groups of (1.) *Campagnols proprement dits* (ARVICOLA,) including the *A. subterraneus*, De Selys; *A. arvalis*, Lacep.; *A. socialis*, Desm.; *A. duodecim-costatus*, De Selys: and (2.) *Campagnols murins* (MYODES, De Selys), which last group is instituted for the reception of the *A. rubidus*, De Selys (the *A. riparia* of Yarrell), which is stated, on the authority of Nathusius, to have the molar teeth with fangs in the adult state, a character wherein it differs from all the other species of the genus.

M. De Selys-Longchamps states that the genus *Mynomes* of Rafinesque forms a third section characterized by its scaly tail. It is not his intention, however, to raise any of these sections to the rank of a genus or a subgenus. He observes that they all pass into each other by insensible differences in the length of the tail and ears; and in regard to the character derived from the fangs of the teeth, that it probably exists more or less in other species. And in imposing Latin names on these groups, taken from among the synonyms of the genus, his only object has been to give foreigners an idea of the different names which he has used in French.

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scribed as well as figured in the author's brochure on the *Arvicolæ* of Liége. They are as follows :

1. *A. monticola*. Size of the *A. amphibius*. Tail pale ash, a little shorter than half the length of the body : fur yellowish grey, mixt with pale yellowish at the sides, whitish ash beneath and on the feet. (13 pairs of ribs?)

Inhabits the Pyrenees.

2. *A. Savii*. Size of the *A. arvalis*. External ears a little hairy, much shorter than the fur : tail a little shorter than one-third of the body ; of two colours, brownish above, whitish beneath : fur brown-grey above, ash colour beneath : feet pale ash. (14 pairs of ribs.)

Inhabits Tuscany, Lombardy, and probably all Italy.

3. *A. subterraneus*. Size a little larger than that of the *A. arvalis*. Ears a little shorter, of the length of the fur, nearly naked ; eyes very small : tail one third the length of the body, of two colours, blackish above, white beneath : fur blackish grey above, ash-colour or whitish on the abdomen only : feet deep ash. (13 pairs of ribs.)

Inhabits Belgium, French Flanders, and the environs of Paris, but no other parts of Europe, unless it be the *Mus agrestis* of Linné, in which case it is found also in Sweden*.

4. *A. duodecim-costatus*. Size of the *A. arvalis*. Tail a little longer than one third of the body. Twelve pairs of ribs : six lumbar vertebræ. Fur? . . .

Inhabits the South of France and the frontiers of Switzerland, but supposed to be very rare. No skin of it exists, and only the osteology of it is known. The 12 pairs of ribs distinguish it from every other species excepting the *A. socialis*, and from this it may be known by its longer tail, and by having 6 instead of 5 lumbar vertebræ.

The *A. destructor* is a species found in Italy, which appears to have been recognised by M. De Selys-Longchamps and M. Savi nearly about the same time. It was originally described by the former in the 'Revue Zoologique,' under the name of *A. Musignani*, but this name is exchanged here for *destructor* out of courtesy to M. Savi, who had previously thus designated it. It is closely allied to the *A. amphibius*, from which it may be known by a difference in the fur, which much resembles that of the *Mus decumanus*, and by the nearly uniform whitish-ash colour of the under parts. But its great peculiarity resides in the form of the cranium, which is said to be quite different from that of its congeners. This part is represented,

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The *A. terrestris* is the *A. argenteratensis* of Desmarest and Lesson. It is not the *A. terrestris* of the 'Fauna Italica,' this last being the same as the *A. destructor* mentioned above.

To each of the three monographs in this work is annexed a tabular arrangement of the dimensions of all the species contained in the respective genera. And in the case of the *Arvicolæ*, there are added two other tables; one exhibiting the relative characters of the crania in the different species, the other the number of the ribs and vertebrae.

The work concludes with a complete list of all the *Mammalia* hitherto discovered in Europe, amounting to 188 species, exclusively of those which have been introduced by man, and which are only domesticated.

We have dwelt the longer on this work in the hope that it may stimulate naturalists to making further researches in our own country. Notwithstanding the labours of M. De Selys-Longchamps, and the pains which he has taken in the monographs above noticed, we are satisfied that the subject is not yet exhausted. There are several species in the three genera of *Sorex*, *Mus*, and *Arvicola* which require further investigation, and doubtless some which remain yet to be discovered. The British Shrews are not entirely cleared up. We have also more than once had submitted to our examination specimens of a mouse from the tops of the Irish mountains, closely allied to the *M. sylvaticus*, but apparently offering some differences: unfortunately they were not in a sufficiently good state of preservation to allow of any decided opinion respecting them. We may further add that it appears doubtful whether we have not in our museums two species of *Arvicola* confounded under the name of *A. agrestis* or *arvalis*, one of which is the true *A. arvalis* of M. De Selys-Longchamps, but the other so far distinct as not to have been immediately recognised by this naturalist when specimens were submitted to his view during his recent visit to this country. Ireland again seems to possess a species of this genus which it is likely will be found different from all those hitherto recorded as natives of Great Britain. But further remarks on some of these points will probably be brought under the notice of our readers before long.

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